CHICAGO NEUROLOGICAL SOCIETY.

October 24, 1901.

The President, Dr. Hugh T. Patrick in the chair.

Bitemporal Hemianopsia.—Dr. H. Gradle presented a patient with bitemporal hemianopsia and discussed the probable site and nature of the lesion causing the symptom.

Myasthenia Gravis.—Dr. H. T. Patrick presented a patient who was believed to have myasthenia gravis. He was a negro (not pure) twenty-five years of age, a cooper, and had been practically well until five years ago, when the present trouble began. He first noticed weakness of the arms when at his work, which weakness soon involved the legs and was accompanied by a dull ache or feeling of intense fatigue. He early noticed that a short rest would relieve the symptoms, which would then reappear after a few minutes of work. He gradually grew worse and had been able to do no work whatever for three years. The most striking symptom was a generalized myasthenic condition present to some extent at all times but enormously increased by a short period of activity. For instance, after a rest he could start off at a brisk rate and with almost a normal gait, but would rapidly weaken, and after walking about a block be compelled to come to a standstill. After a short rest he could again proceed as before. There was no particular involvement of limited groups of muscles as has been the rule in reported cases. The muscles about the shoulders and neck and the pelvo-femoral group seemed to be weaker than others, but the eye muscles, face muscles and muscles of mastication, although not vigorous, were not weaker than those of the extremities. The myasthenic electric reaction was present to a very limited degree, and the deep reflexes also showed some slight exhaustion after being rapidly elicited twenty or thirty times. As the blood, urine, feces and all the thoracic and abdominal organs were normal, and there were no conclusive evidences of organic involvement of the nervous system, the author was driven to a diagnosis of myasthenia gravis.

Lesions of the Conus Medullaris and Cauda Equina.—Dr. Bertram W. Sippy said that the symptoms produced by these lesions are well defined; but may be readily overlooked unless one is familiar with the clinical picture produced.

It is desirable both clinically and anatomically to limit the conus medullaris to the third, fourth and fifth sacral and coccygeal segments. Disease of those segments of the cord show characteristic sensory and motor disturbances. Sensation is impaired in an area symmetrically distributed involving the integument of the penis, scrotum, perineum, anus, inner aspect of the buttocks, and posterior surface of the thighs. The sensibility of the mucous membrane of the penis and rectum may also be dulled. If the lesion is sufficiently destructive, the muscular power of the bladder and rectum may be seriously impaired, sexual power may be lost and bed-sores may develop.

Lesions of certain fibers of the cauda equina may produce a clinical picture very similar to that of conus disease. It is extremely important to be able to recognize and differentiate the two conditions, since caudal disease may often be amenable to surgical treatment. Dr. Sippy reported nine cases in which one or the other of these structures was involved. The lesion included focal myelitis, tumor of the conus, spinal column injury, tumor of the vertebræ, and tuberculous spondylitis. The symptoms of the conus lesions were observed in one case of tabes. Autopsy was held on the case and tumor of the conus was found.

The areas of anesthesia in those cases in which the adjacent cord was involved showed a striking similarity, and did not correspond accurately to the areas previously mapped out by others who have contributed to the subject of spinal localization. The general resemblance, however, was very close.

A few of the more important points given in differential diagnosis between diseases of the cauda equina and conus medullaris were: Except when due to trauma, disease of the cauda usually develops slowly, producing symptoms more or less characteristic of "root diseases." Pain upon movement is first felt in the lower extremities. Later the pain becomes spontaneous and persistent with exacerbations. Subsequently, anesthesia develops. If the lesion is uniform compression of the cauda, the cutaneous distribution of its central fibers are the first areas affected. Bladder and rectum symptoms may appear early, and are usually present before anesthesia becomes pronounced. Motor weakness is present in proportion to the pressure on the motor fibers and as a rule, does not appear until pain has become a prominent feature. The paralysis is characterized by loss of muscular tone. At onset, reflexes may be exaggerated; later, they are lost. Atrophies may develop. The electrical reactions may be altered. Decubitus has been noted. Disease of the conus is characterised by the sensory and motor symptoms previously described. In addition, the symptoms are likely to develop rapidly. Sensation may not be disturbed alike for all qualities. The pain and temperature sense is likely to be more seriously affected than touch sense. Pain is absent. Decubitus is more likely to occur than in caudal disease. Above all that which characterizes disease of the cauda, is pain. In a given case the absence of pain speaks directly for the conus lesion.

In the discussion which followed Dr. Patrick's paper, Dr. Lodor inquired of the mental condition of the patient, as to whether speech was slow and intellection sluggish. Dr. Sippy asked whether there were not present some symptoms of Addison's disease and whether the tension of the pulse had been noted. Dr. Goodkine called attention to the fact that no mention was made of the condition of the patient's voice.

In reply Dr. Patrick stated that while the man's voice was not strong and speech was slow, intellection seemed normal, and that there was no bronzing of the skin discoverable, and the pulse was soft and normal.

In discussing Dr. Sippy's paper, Dr. Kuh said that in all acute cases of segmental cord lesions low down, the diagnosis was made from symptoms as given at the outset, and was very usually wrong, as the symptoms at first indicated a larger lesion than subsequently appeared. In making a differential diagnosis between conus and caudal lesions it is important to remember two symptoms, pain and disturbances of motility. In conus lesions there is less pain and more disturbance of motility, while in lesions of the cauda equina, the reverse is true.

Dr. Barker asked Dr. Sippy whether in his different cases, the overlapping of the terminal cutaneous nerves could be demonstrated. Dr. Sippy replied that while each area of skin contained fibers from the separate segments of the cord, the overlapping was in the roots and not in the segments. He also stated that disturbances of pain and temperature were more sharply outlined than touch.

Dr. Patrick cited two cases where the anesthesia was found on the back of the leg in a continuous strip.